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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

PLUTA, L

ART UNIT	PAPER NUMBER
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2761

DATE MAILED: 04/14/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/037,916

Applicant(s)
Nobuhiko Nishio And Izumi Asoh

Examiner
Laura H. Pluta

Group Art Unit
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☒ Responsive to communication(s) filed on Mar 10, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-12 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-12 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☒ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Drawings

1. New formal drawings are required in this application because the draftsman's objection. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the Patent and Trademark Office no longer prepares new drawings. The drawings are acceptable for examination purposes only. New formal drawings will be required when the application is allowed.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 8, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida (4,736,094).

As to claim 8:

Yoshida discloses an IC card (integrated circuit card, col. 2, lines 60-68) applicable to an electronic purse system (financial transaction processing system, col. 2, lines 60-68) having a double-structured purse (col. 6, lines 12-58, Figs. 1, 4) comprising: a memory (col. 6, lines 12-27, Fig. 1) in which a first purse with a first amount of money stored therein, a second purse with a second amount of money stored therein (col. 6, lines 51-58, Fig. 4) and a payment processing program are stored; a processor for executing payment processing according to the payment processing program stored in said memory (col. 3, lines 12-34); a communicating unit for executing communications with external devices (col. 6, lines 12-37, col. 7, lines 65-68, col. 8, lines 1-41, Figs. 1-2); wherein said payment program executes payment processing according to the second amount of money stored in said second purse when a payment command is received from an external payment demanding device without any purse being specified, and executes the payment processing to said external device according to the amount of money stored in said first purse when a payment command based on specification of said first purse is received (col. 3, lines 25-68, col. 4, lines 1-32).

As to claim 10:

Yoshida discloses an IC card transaction apparatus (integrated circuit card, col. 2, lines 60-68) for selecting either one of an amount of money stored in an IC card and an amount of money stored

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in a center account and executing payment in cash according to the selected amount of money comprising: a detector for detecting insertion of an IC card (col. 6, lines 12-37, col. 7, lines 65-68, col. 8, lines 1-41, Figs. 1-2); an acceptor for accepting specification of an arbitrary mode after insertion of said IC card is detected by said detector (col. 6, lines 12-37, col. 7, lines 65-68, col. 8, lines 1-41, Figs. 1-2); and a mode switch for switching from said center account to a mode for payment in cash when specification of an arbitrary mode is not accepted in said acceptor within a preset period of time after insertion of said IC card is detected (col. 10, lines 45-68, col. 11, lines 1-34, col. 12, lines 64-68).

As to claim 12:

Yoshida discloses an IC card (integrated circuit card, col. 2, lines 60-68) applicable to an IC card transaction system, said card having a first purse and a second purse and used for transaction making use of the double-structured purse (col. 6, lines 12-58, Figs. 1, 4) consisting of said first purse and second purse with the transaction apparatus (col. 6, lines 51-58, Fig. 4); wherein, when a code number is received from the transaction apparatus, the processing for authorizing the individual is executed with said received code number and amounts of money to be stored in said first and second purses respectively are outputting to said transaction apparatus (col. 3, lines 25-68), and on the other hand, when a code number is not received from said transaction apparatus, an amount of money for said second purse is outputting to said transaction apparatus (col. 3, lines 25-68). The Examiner would like to point out that in Yoshida, if the first account or "purse" accessed does not have enough money for a payment, the second account is accessed and

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the transaction is completed, thus the authorization code is not given by the banking or other authority for the first account since there is a lack of funds, and then further goes to the second account.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (4,736,094) in view of Read (EFTPOS: electronic funds transfer at point of sale, *Electronics & Communication Engineering Journal*, November/December, 1989).

As to claim 1:

Yoshida discloses an electronic purse system (financial transaction processing system, col. 2, lines 60-68) having a double-structured purse comprising (col. 6, lines 12-58, Figs. 1, 4): a portable type of card-formed carrier body (col. 5, lines 63-68, col. 6, lines 1-27) comprising a first rewritable and non-volatile memory (col. 6, lines 12-27, Fig. 1) in turn having a first area in which a first deposited amount is stored and a second area in which a second deposited amount is stored (deposit, first area, second area, col. 6, lines 51-58, Fig. 4), and an I/O terminal for accessing information stored in said first and second non-volatile memories respectively (terminal, col. 6,

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lines 12-37, col. 7, lines 65-68, col. 8, lines 1-41, Figs 1-2); when accessing said first area, information is received from said I/O terminal, access is permitted if a code number included satisfies a prespecified relation, and when accessing said second area, access to said second area is permitted if an identification number indicating a type of accessible transaction apparatus (Fig. 8B-9B, col. 3, lines 35-59); a withdrawing machine for transferring all or a portion of a deposited amount to the first area of the memory in said card-formed carrier body, which identification information for the apparatus and a code number inputted by the card holder and transfers the information or number to said card-formed carrier body (col. 3, lines 35-68, col. 7, lines 12-29, Fig. 6); an input unit for inputting a code number and a amount of money to be transferred from said first area to said second area in said card-formed carrier body (col. 3, lines 35-68); a transfer unit for supplying the code number, amount of money to be transferred, and identification information inputted by said input unit to said card-formed carrier body (col. 3, lines 35-68, Fig. 10A-10B); and a device in the user's side for transmitting an amount of money used and the apparatus information to use a deposited amount stored in the second area of said card-formed carrier body (col. 3, lines 35-68, col. 4, lines 1-32); wherein said card-formed carrier body updates said first area, when transfer is instructed by said transfer unit and said individual's authorization number is accepted, by subtracting a specified amount of money from the deposited amount stored in said first area, and also writes the specified amount of money in said second area, and allows, when an amount of money to be used is instructed from said device in the user's side and at the same time access to said second area is permitted according to said identification

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information, use of the instructed amount of money with said device in the user's side by subtracting said amount of money to be used (col. 3, lines 35-68, col. 4, lines 1-32). However, Yoshida does not specifically use ciphering and deciphering. Ciphering and deciphering of information is the equivalent as encrypting and decrypting data. Read discloses a means for encrypting data to be transmitted, and means for decrypting encrypted data which is received, thereby preventing interception or interference (encryption, decryption, Figs. 9-11, pg. 268, cols. 2-3, pg. 268, cols. 1-3, pg. 270, col. 1, ¶1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the encryption of Read in the system of Yoshida as Cordonnier ("Smart cards: present and future applications and techniques", *Electronics & Communication Engineering Journal*, October, 1991) teaches the use of encryption in the integrated circuit card technology (Cordonnier, pg. 207, cols. 1-2).

As to claim 2:

Yoshida discloses an electronic purse system (financial transaction processing system, col. 2, lines 60-68) having a double-structured purse (col. 6, lines 12-58, Figs. 1, 4); wherein said card-formed carrier body has a program making said second area allow only the withdrawal processing stored in said second non-volatile memory (col. 6, lines 12-27, col. 9, lines 28-63, Fig. 1).

As to claim 3:

Yoshida discloses an electronic purse system (financial transaction processing system, col. 2, lines 60-68) having a double-structured purse (col. 6, lines 12-58, Figs. 1, 4); wherein said card-formed carrier body has further a third area in said first non-volatile memory (col. 6, lines 12-27,

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Fig. 1) with identification information for a device in the user's side and a code number each allowing access to said third area registered in said third area (col. 6, lines 38-58, Figs. 3-4), and a program for allowing addition or subtraction in said third area when identification information and a code number corresponding to information registered from said device in the user's side are inputted is stored in said second non-volatile memory (col. 6, lines 12-27, col. 7, lines 65-68, col. 8, lines 1-41, Figs. 1, 5-6).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (4,736,094) in view of Read (EFTPOS: electronic funds transfer at point of sale, *Electronics & Communication Engineering Journal*, November/December, 1989) and in further view of Lessin et al. (4,868,376) in view of Cordonnier ("Smart cards: present and future applications and techniques", *Electronics & Communication Engineering Journal*, October, 1991).

As to claim 4:

The reference of Yoshida in view of Read discloses all of the above identified limitations except the storing of historical information in an electronic purse system. However, Lessin et al. discloses an electronic purse system (see abstract) having a double-structured purse (col. 6, lines 12-58, Figs. 1, 4); wherein said card-formed carrier body stores in said third area identification information indicating said device in the user's side subjected to addition and an amount of added money as historical information (col. 7, lines 21-65, Figs. 10A-10B). Cordonnier ("Smart cards: present and future applications and techniques", *Electronics & Communication Engineering Journal*, October, 1991) teaches the use of various components in smart card and integrated

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circuit card technology (Cordonnier, pg. 208, col. 3, pg. 209, cols. 1-2) which substantiates the modification to the system of Yoshida. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the storing of information as taught by Lessin et al. with the system of Yoshida in view of Read.

Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (4,736,094) in view of Read (EFTPOS: electronic funds transfer at point of sale, *Electronics & Communication Engineering Journal*, November/December, 1989) in further view of Cordonnier ("Smart cards: present and future applications and techniques", *Electronics & Communication Engineering Journal*, October, 1991).

As to claim 5:

Yoshida discloses an electronic purse system (financial transaction processing system, col. 2, lines 60-68) having a double-structured purse (col. 6, lines 12-58, Figs. 1, 4); wherein said card-formed carrier body skips, when said device in the user's side demands payment without specifying any area in said first non-volatile memory (col. 6, lines 12-27, Fig. 1), the processing for the transferred information from said device in the user's side, and allows transaction for subtracting information on the specified amount of money from said second deposited amount (col. 3, lines 4-59). However, Yoshida does not specifically use ciphering and deciphering.

Ciphering and deciphering of information is the equivalent as encrypting and decrypting data.

Read discloses a means for encrypting data to be transmitted, and means for decrypting encrypted data which is received, thereby preventing interception or interference (encryption, decryption,

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Figs. 9-11, pg. 268, cols. 2-3, pg. 268, cols. 1-3, pg. 270, col. 1, ¶1). Cordonnier ("Smart cards: present and future applications and techniques", *Electronics & Communication Engineering Journal*, October, 1991) teaches the use of encryption in the integrated circuit card technology (Cordonnier, pg. 207, cols. 1-2) for the purpose of security during data transfer. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the encryption of Read in the system of Yoshida.

As to claim 11:

Yoshida discloses a transaction apparatus for executing transaction with an IC card (integrated circuit card, col. 2, lines 60-68) having a first purse and a second purse (col. 6, lines 51-58, Fig. 4); wherein said transaction apparatus executes transaction making use of the amount of money stored in said second purse, when a demand for payment is received based on specification of said first purse, if it is turned out, after the demand for payment is authorized according to the code number, that the amount of money stored in said first purse is less than the amount of money required for the transaction (col. 3, lines 35-68, col. 4, lines 1-32). However, Yoshida does not disclose ciphered information. Ciphering and deciphering of information is the equivalent as encrypting and decrypting data. Read discloses a means for encrypting data to be transmitted, and means for decrypting encrypted data which is received, thereby preventing interception or interference (encryption, decryption, Figs. 9-11, pg. 268, cols. 2-3, pg. 268, cols. 1-3, pg. 270, col. 1, ¶1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the encryption of Read in the system of Yoshida as Cordonnier ("Smart cards:

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present and future applications and techniques”, *Electronics & Communication Engineering Journal*, October, 1991) teaches the use of encryption in the integrated circuit card technology (Cordonnier, pg. 207, cols. 1-2).

Claims 6-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (4,736,094) in view of Lessin et al. (4,868,376) in further view of Cordonnier (“Smart cards: present and future applications and techniques”, *Electronics & Communication Engineering Journal*, October, 1991).

As to claim 6:

Yoshida discloses an IC card (integrated circuit card, col. 2, lines 60-68) applicable to an electronic purse system (financial transaction processing system, col. 2, lines 60-68) having a double-structured purse (col. 6, lines 12-58, Figs. 1, 4) comprising: a memory (col. 6, lines 12-27, Fig. 1) in which a first purse with a first amount of money stored therein, a second purse with a second amount of money stored therein (col. 6, lines 51-58, Fig. 4), communicating means for executing communications with external devices (col. 6, lines 12-37, col. 7, lines 65-68, col. 8, lines 1-41, Figs. 1-2); wherein according to said payment processing program, said processor takes a step of; distinguishing said external device communicating between first type of transaction using only said second purse being allowed and second type of transaction using both of said first and said second purse being allowed (Figs. 8B-9B, col. 3, lines 35-59); said external device being allowed to proceed said second type of transaction during the payment transaction (Figs. 8B-9B, col. 3, lines 35-59); and executing payment processing program without ciphering

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communication data for said external device being allowed to proceed said first type of the transaction (col. 3, lines 35-68, col. 4, lines 1-32). However, Yoshida does not disclose the use of a payment processing program on the IC card or the use of a cipher program. Lessin et al. discloses a payment processing program (Lessin, col. 3, lines 36-56) and cipher program (Lessin, encryption, col. 4, lines 24-53); processor for executing said payment processing program (Lessin, col. 3, lines 36-56) and cipher program (Lessin, encryption, col. 4, lines 24-53); executing payment processing program with ciphering at least a part of communication data (Lessin, col. 3, lines 36-56, encryption, col. 4, lines 24-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the storing of information as disclosed by Lessin et al. with the system of Yoshida as Cordonnier ("Smart cards: present and future applications and techniques", *Electronics & Communication Engineering Journal*, October, 1991), teaches the use of various components in smart card and integrated circuit card technology (Cordonnier, pg. 208, col. 3, pg. 209, cols. 1-2).

As to claim 7:

Yoshida discloses an IC card (integrated circuit card, col. 2, lines 60-68) applicable to an electronic purse system (financial transaction processing system, col. 2, lines 60-68) having double-structured purse (col. 6, lines 12-58, Figs. 1, 4), further comprising: said memory (col. 6, lines 12-27, Fig. 1) storing key information in a read protection area protected to read from said external device (col. 4, lines 28-32, Figs. 3-4). However, Yoshida does not disclose the use of a cipher program. Lessin et al. discloses a cipher program which is commonly embodied in

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the authorized external devices for the electric money transaction (Lessin, encryption, col. 3, lines 36-56, col. 4, lines 24-53); and said cipher program ciphering the transaction data using said key information stored said memory (Lessin, encryption, col. 3, lines 36-56, col. 4, lines 24-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the storing of information as disclosed by Lessin et al. with the system of Yoshida as Cordonnier ("Smart cards: present and future applications and techniques", *Electronics & Communication Engineering Journal*, October, 1991), teaches the use of various components in smart card and integrated circuit card technology (Cordonnier, pg. 208, col. 3, pg. 209, cols. 1-2).

As to claim 9:

Yoshida discloses an IC card (integrated circuit card, col. 2, lines 60-68) applicable to an electronic purse system (financial transaction processing system, col. 2, lines 60-68) having a double-structured purse (col. 6, lines 12-58, Figs. 1, 4) comprising: a memory (col. 6, lines 12-27, Fig. 1) in which a first purse with a first amount of money stored therein, a second purse with a second amount of money stored therein (col. 6, lines 51-58, Fig. 4), a communicating unit for executing communications with external devices (col. 6, lines 12-37, col. 7, lines 65-68, col. 8, lines 1-41, Figs. 1-2); and an interface for managing interface with external transaction devices (col. 3, lines 12-59); wherein said payment program executes the payment processing according to the second amount of money stored in said second purse when a payment command not based on specification of the first purse is received via said interface from an external device, and communicates with the external device and executes the payment processing to said external

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device according to the amount of money stored in said first purse when a payment command based on specification of said first purse is received (col. 3, lines 35-68, col. 4, lines 1-32). However, Yoshida does not disclose the use of a cipher program in relation to the payment processing system. Lessin et al. discloses a ciphering/de-ciphering program (Lessin, encryption, col. 3, lines 36-56, col. 4, lines 24-53) and a payment processing system with a processor for executing payment processing according to the payment processing program stored in said memory (Lessin, col. 3, lines 36-56, col. 4, lines 24-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the processing and ciphering as disclosed by Lessin et al. with the system of Yoshida as Cordonnier ("Smart cards: present and future applications and techniques", *Electronics & Communication Engineering Journal*, October, 1991), teaches the use of various components in smart card and integrated circuit card technology (Cordonnier, pg. 208, col. 3, pg. 209, cols. 1-2).

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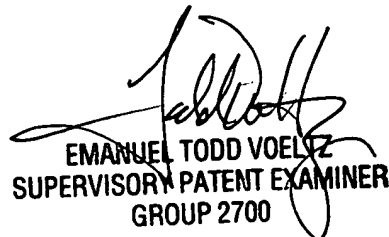
VA, Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura H. Pluta whose telephone number is (703) 305-0571. The examiner can normally be reached on Monday through Friday from 8:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emanuel Todd Voeltz, can be reached on (703) 305-9714. The fax phone number for this Group is (703) 308-9052.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

LHP

April 12, 1999


EMANUEL TODD VOELTZ
SUPERVISORY PATENT EXAMINER
GROUP 2700